

**B-12 : SOME CHARACTERISTICS OF SALT-AFFECTED SOILS IN
HAMBANTOTA DISTRICT**

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In Sri Lanka, there are over 300,000 ha affected due to soil salinity and alkalinity and this area increases annually. The natural vegetation in salt-affected areas consists of sparsely distributed clumps of thorny shrubs and occasional stunted individual trees interspersed with grassland. These areas are characterised by very low biological productivity, causing scarcities of fodder and fuelwood. Besides, salinity has posed a host of other problems such as degradation of environment due to harsh climatic conditions, accelerated run-off and erosion, poor groundwater recharge etc. Hence, it becomes imperative to revegetate the salt-affected soils to overcome the above undesirable consequences. To carry out a revegetation programme effectively and efficiently, it is important to characterize the salt-affected soils. Studies were carried out to ascertain the electrical conductivity (EC) and pH of soil and ground water in some salt-affected areas. A soil solution (soil : water = 1:1) was used to determine the EC of soil. The study involved sampling soil i.e. from the top 15 cm and groundwater at several locations in the Hambantota District. The EC of soil varied from 12 to 72 dSm^{-1} while that of ground water from 5 - 54 dSm^{-1} .

The pH of the soils sampled varied from 6.19 - 7.37. Thus, the soils in the sampled areas can be categorised as saline. The water having an EC greater than 3 dSm^{-1} is considered unsuitable for irrigation. Accordingly the ground water in the study sites proved unfit for irrigation purposes.